

---

‘MEADOWLANDS ESTATE’  
DROPE ROAD, ST GEORGES  
VALE OF GLAMORGAN

PLANNING, DESIGN & ACCESS  
STATEMENT

February 2022

[rpsgroup.com](http://rpsgroup.com)



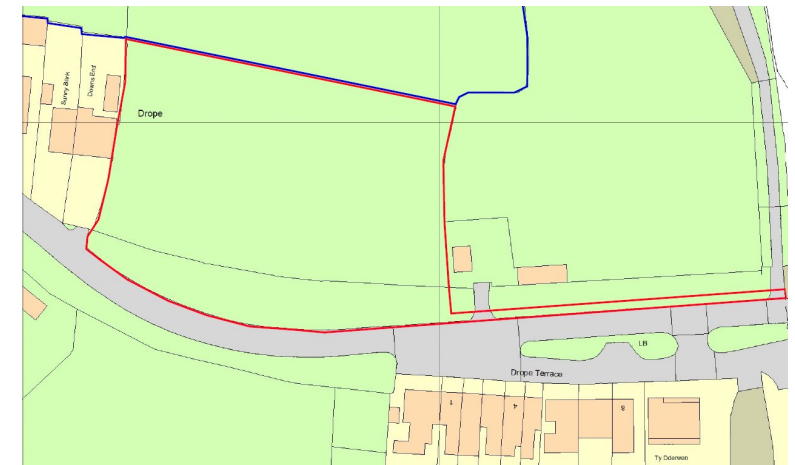
---

# The site and wider context



## The site

- The site is located at National Grid Reference ST 11059 75811 and is approximately 0.5ha. It comprises an arable field bounded by a mix of hedgerows with trees to the south and east and scattered trees to the north-west. The site sits behind an area of scrub to the road.
- The site is accessed off Drope Road, a lightly trafficked road with no street lighting or footways in the vicinity of the site.
- There are a number of dwellings to the immediate west of the site and on Drope Terrace opposite, which front Drope Road in a ribbon form.





### Wider context

- In a wider context, the A4232 dual carriageway runs close to the eastern boundary of the site, marking the transition to the built up urban area of Ely/Caerau.
- To the west, the character is more rural towards St Georges and St Brides-super-Ely to the north and St Nicholas to the south.
-

---

# The scheme

---

## Principles

- The proposal is to develop 9 highly sustainable, affordable homes, that it is intended will be owned and managed by Newydd Housing Association, an approved Housing Association Partner to the Vale of Glamorgan Council. The applicant is in negotiation with Newydd on the details of a 'subject to planning' acquisition of the development.
- The dwelling mix is as follows 9, affordable units (2x 3 bed semi detached , 2 x 2 bed, semi detached, 4 x 1 bed flats and 1 x 2 bed bungalow.
- The scheme has been brought forward in close liaison with The Rural Housing Enabler for the Vale of Glamorgan Council, The liaison with her has been invaluable in identifying the local housing need in the Peterston Super Ely ward and the process of allocating the properties.
- The proposal draws on/responds to the Council's pre-application response reference P/DC/2020/00005/PRE of March 2020 which was for this proposal to be sited on greenfield land to the rear of 2 properties 'Meadowlands' and 'Green Meadow', accessed between them from Drope Road.
- This proposal now follows the existing pattern of development along Drope Road (and Drope Terrace), which is for properties to front the road. The proposal continues the run of existing dwellings from the property 'Downs End' to the immediate west.
- Responding to the predominant layout and form of orientation, together with extensive retention of existing vegetation/hedgerows demonstrates a clear design response to setting.
- In addition to the Rural Housing Enabler, Informal pre-application consultation/liason has also taken place between the applicant and the Community Council.
- Post submission, it is the applicant's intent to continue dialogue with the Community Council as well as local residents.



## Placemaking – making a better place

The Placemaking Wales Charter has been developed by Welsh Government and the Design Commission for Wales in collaboration with the Placemaking Wales Partnership – a multi-disciplinary group representing professions and organisations working within the built and natural environment.

The Charter builds on the strengthening focus on Placemaking in policy and practice in Wales and aims to provide a common understanding of the range of considerations that go into placemaking.

The charter outlines six placemaking principles that cover the range of considerations that contribute to establishing and maintaining good places. Both CfW Architects and Newydd are signatories to the Charter. These are as follows:

- Involve the local community in the development of proposals
- Choose sustainable locations for new development
- Prioritise walking, cycling and public transport
- Create well defined, safe and welcoming streets and public spaces
- Promote a sustainable mix of uses to make places vibrant
- Value and respect the positive distinctive qualities and identity of

existing places. These objectives, along with those embodied in Planning Policy Wales (see later in this statement) that have shaped the design response of this proposal.

# Layout, appearance and design



legend - boundary treatment and hard & soft landscaping

	1.8m high close boarded fence
	1.8m high timber gate
	900mm high post & wire fence
	1.8m high brick wall
	garden shed
	wheeled bins and food caddy
	clothes lines
	private rear garden
	concrete slab patio at back garden
	front garden/amenity area
	tarmac
	permeable paving
	pedestrian walkway (finishes to be confirm)
	landscaping

# Layout, appearance and design



---

## Access and Connectivity

As outlined in the accompanying Transport Statement, Drope Road is a lightly trafficked highway with no street lighting or footways near the proposed development. There is a shared surface road in front of Drope Terrace some 15m east of the site and a footway on both sides of the bridge over the A4232 around 130m from the site.

Drope Road then crosses the Vale of Glamorgan boundary and enters Cardiff. Shortly after crossing the A4232 a 30mph speed limit is in operation and in around 250m the road changes from rural to urban.

Approximately 850m from the site access Drope Road joins Michaelston Road. On the south-west corner there is a group of education and community premises including St. Fagan's Primary School, Ely and Caerau Children's Centre, an Activity Centre and Michaelston Community College.

Drope Road is approximately 6.6m wide at the proposed access junction and maintains this width to the bridge over the A4232. For around 70 m west of the access the road is around 7m wide after which it narrows to around 4.5m.

It is understood that the Vale of Glamorgan Council has no proposals

to introduce walking/cycle facilities on Drope Road near to the development. No reference to Drope Road is on the Integrated Network Maps. Similarly, Cardiff Council does not appear to have any proposals for walking or cycling for the area east of Route A4232.

Vehicular access to the proposed development will be designed to local authority adoptable standards and thus the internal road will be 5.5m wide with 2m footways on each side. It will be lit and a 20mph speed limit introduced.

Parking Guidelines require a maximum of one space per bedroom for houses and flats plus a visitor space per five units. These will be provided.

There is an existing bus stop around 35m to the east of the proposed development. A footway will be constructed from the access to the stop and a new shelter provided. This footway will continue to the bridge over the A4232, enabling residents to walk from the site across the bridge and through the existing park, both to the local shops and to local schools among other facilities.

---

# Quality and Sustainability



## Welsh Development Quality Requirements 2021. Creating Beautiful Homes & Places

In July 2021, Welsh Government published a new set of quality requirements for affordable housing. Which establishes minimum functional requirements for new and rehabilitated general needs affordable housing. The requirements are that home should be:

- High quality, innovative and sustainable (value for money, whole life cost, modern methods of construction and decarbonised)
- Flexible, responsive to the changing needs of the occupants, meet the changing needs of a variety of households who will occupy the building over its life and be of sufficient size.
- Safe and secure.

The following section outlines some of the fundamental features which demonstrate how the proposed dwellings comply with the quality requirements.

Sustainability is at the core of this project, with an array of infrastructure/technology embedded into the design of the properties in terms of built fabric and power/energy. The following are some of the main interventions, explored further on the following pages: insulated

concrete forms construction (ICF), ground source heat pumps, solar power, energy storage, triple glazing and an electric vehicle charging point for each dwelling among others.

In combination, the infrastructure and technology will ensure the properties are low carbon, energy efficient/energy free, with the added benefit that such energy reduction methods will also help with re-assurance around fuel poverty and ensure that residents have a high level of health and well being from knowing their energy expenditure will be minimal.

## Energy Saving Features in the Homes

### Ground source heat pumps (GSHP)

“Ground Source Heat Pumps” (GSHP), are a domestic hot water generating system that extracts the heat from water and uses that extracted heat to keep the house warm. The GSHP is located inside the home, just like a gas or oil boiler. Each GSHP on this development will be connected to a borehole. The system works by water being pumped down the borehole on a continuous basis when the GSHP is operating. The heat is transferred from the surrounding ground to the water and as it emerges from the borehole the water is some degrees warmer than when it entered the borehole. There is only one moving part in the whole operation and that is the electrically powered heat extraction pump.

If the GSHP equipment in the home is powered from the mains electricity supply then there is a 60-70% saving in energy costs, but if the GSHP is connected to a Renewable Electricity supply (such as solar PV panels) then the saving is 100%.

At this development, Meadowlands Estate will be installing Solar PV Panels on the roof of each home. These panels will supply the electricity needed to power the GSHP, along with any other equipment requiring electricity in the new homes. This means that the residents, especially those who may be on limited income, will have zero heating bills.

Of course, residents will still have to pay the standing charge to the commercial electricity providers as the homes will continue to be connected to the mains supply and this will ensure a mains backup supply.

### Heat recovery system

Every home will have a self-contained heat recovery system installed. Because the houses will be so well insulated, during, for example, the summer months when cooler air is desired then this ventilation product will provide fresh air on a continual basis 24/7. This will also obviate the need to open any windows in the winter, losing heat from inside the home. The system that will be installed uses a miniscule amount of power to run the ventilation motor(s). All of the power to run the system will be provided by the Solar PV electricity generators, and at night the Lithium-Ion batteries.

There is also a heat recovery heat exchanger in the distribution duct. This takes the heat from the exiting air and uses this recovered heat to warm the incoming air so that only a little amount of warm air is lost during the air circulation. Once set, the heat recovery product requires no intervention from the residents and no maintenance as there is only one moving part, the air movement pump.

---

## Triple glazing

Today in the UK many new homes are fitted with double glazed windows. However, rather than using double glazing, we use triple glazing. This dramatically reduces heat loss through the windows in colder temperatures making your home much warmer.

## Skirting board heating

“Skirting Board Heating” (SBH) is a very efficient way of heating up your home quickly. Normally heating systems supply the radiators with hot water pumped along pipes to reach them. This product is different. The regular wooden skirting boards are replaced with the SBH system. They look exactly the same as the wood skirting boards that they will replace. These heating panels are made from aluminium with two internal copper pipes through which the hot water passes and heats the aluminium panels to warm the room. By using the SBH system furniture can be placed against any wall as there will be no steel radiators in the way anywhere.

## Insulated Concrete Forms (ICF) Construction

The method of constructing the walls will be of ICF or Insulated Concrete Forms. Instead of the homes being built with brick or blockwork (or even wood covered by brick) they will be constructed from ICF.

Two 1.2m x 600mm panels of polystyrene that are connected with steel ties form a block. These blocks are placed one on top of the other and form a wall. Then when the first floor level is reached, rebar (steel reinforcing bars) is placed inside the cavity which is filled with concrete. This ensures a completely sealed wall that the outside cold air cannot penetrate, nor can the heat inside be lost through it. The ground floor of the home is constructed using insulated concrete, and so are the ceiling and final roof floors if it is a two-floor home.

Along with the triple glazed windows, all of this insulation makes each home very heat-loss resistant. The saving in heat loss from a building constructed with ICF is considerable.

---

## Solar Power

We will be installing the latest Solar Panels producing 550w each on the roof of every home. Most current UK installed solar panels are either 250w or 300w. On a 3-bed home this will equal 6,600w with 12 panels installed. Allowance must be made for the site's latitude, but even with this latitudinal reduction (as light levels reduce the further from the equator you are) the 3-bedroom home can produce 7,500 Kwh per year of electricity in South Wales according to charts that calculate the light loss due to latitude. If the heating system is powered by GSHPs, the average 3-bedroom home in the UK needs between 6,000 Kwh and 7,000 Kwh of power including individual renewable vehicle charging points.

## Energy Storage

What happens with the excess power generated during the day? Lithium-ion batteries will be installed allowing the storage of 24,000 amp hours for a 3 bedroom home, with slightly less for smaller homes.

Each home will have a small building at the rear of the property to store the batteries. The batteries require no maintenance.

A 3-bedroom home will have 16 x 100 amp 48v batteries storing power. This will store/hold 24 Kwh of power. If the annual average of 7,000 Kwh is divided by 365 days, it will allow the home to run for more than 24hrs with no input of power from daylight. This will also provide power to charge vehicles.

In addition, the homes will have a mains backup connection as security if needed.

---

## Solar hot water

The solar hot water heating system is installed on the roof and includes a hot water tank located in an airing cupboard.

How is hot water provided for washing, etc? By installing solar powered vacuum tubes on the roof of each home. This system feeds hot water to the immersion heater where it sits in a lagged tank until required for use. Washed clothes can be dried in the airing cupboard.

It is also possible to obtain hot water for the immersion heater from an outlet on the GSHP, and there are two further connections:

- (i) a first immersion element that will allow the solar battery store to heat the water; and
- (ii) a second immersion element that will allow the mains electricity to heat the water.

Therefore, there are 4 ways to obtain hot water in the home.

## Electric car charging

Every home will have a standard car charging point. This is powered from the main fuse box and power is available for daytime or overnight charging. The power comes from the battery store and most current electric vehicles can be charged via this charging point.

The charging points will be reverse flow. In other words they enable both the vehicles to be charged from the home power, as well as the home to run on the vehicle power.

- .

---

## LED lighting

Every home will have only LED light fittings installed and LED lightbulbs. LEDs can last for 50,000+ hours each. This equates to more than 15 years before the bulbs need replacing, and usually they last longer than this. In addition, they only use circa 5% of the power compared to traditional lightbulbs.

All the new streetlights will be LEDs. This has two advantages:

- The cost of running these lights to the local authority will be considerably less (20% compared to current street lighting costs); and
- The lit area will be directed at the ground rather than a general wash illuminating the surrounding area. This will avoid disturbance to sensitive wildlife at night.

## Conclusion

The energy saving features described in this document are not usually included in affordable properties. Meadowlands Estate are pleased to be able to include these energy saving features in houses destined to be purchased and rented by a Housing Association in Wales. This will greatly benefit the occupants and allow them to save money, increase their disposable income, keep warm and, most of all, improve their mental health as their energy costs will be virtually eliminated.

- .

---

# Policy context and response

---

## Future Wales, The National Plan

Future Wales has been prepared in the context of Wales' three-tiered development plan system and positioned as the highest tier of development plan. It is a material consideration in plan making and decision making. The strategy seeks to address key national priorities through the planning system, by providing a framework which will in turn direct strategic and local development planning. Being focussed on solutions to issues and challenges at a national scale, it therefore does not allocate development to specific locations nor does it direct specific land uses.

Instead, Future Wales provides strategic direction for all scales of planning and sets out policies and key issues to be taken forward at the regional scale by Strategic Development Plans and at local authority level by Local Development Plans. Strategic and Local Development Plans are required to be in conformity with Future Wales and must be kept up to date to ensure they and Future Wales work together effectively.

The Plan is separated into five sections, with Sections 1 and 2 providing an introduction and an overview of the key challenges and opportunities facing Wales over the next 20 years. Section 3 sets out the desired outcomes and how the impact of Future Wales will be measured and assessed. Then Section 4 provides a strategic policy framework and, finally, Section 5 sets the Welsh Government's ambitions and policies for nationally important growth and development in the four regions of Wales.

A number of challenges and opportunities are identified for Wales nationally, challenges including climate change and Covid-19 and opportunities including progress towards a low carbon economy, renewable energy generation and abundance of natural resources. A changing society, the need for good quality housing, prosperity and improved connectivity are also identified as drivers for the next 20 years.

Future Wales' Outcomes are overarching ambitions based on the national planning principles and national sustainable placemaking outcomes set out in PPW11. The aim of the spatial strategy and regional ambitions contained within Future Wales is to achieve these outcomes.

---

## Future Wales, The National Plan

These Outcomes are inter-related and inter-dependent and will improve places and well-being across Wales.

There are 11 outcomes set out in Future Wales which collectively are a statement of where Wales 'wants to be' in 20 years. These 11 outcomes envisage a Wales where people live:

- ... and work in connected, inclusive and healthy places;
- ... in vibrant rural places with access to homes, jobs and services;
- ... in distinctive regions that tackle health and socio-economic inequality through sustainable growth;
- ... in places with a thriving Welsh Language;
- ... and work in towns and cities which are a focus and springboard for sustainable growth;
- ... in places where prosperity, innovation and culture are promoted;
- ... in places where travel is sustainable;
- ... in places with world-class digital infrastructure;
- ... in places that sustainably manage their natural resources and reduce pollution;

... in places with biodiverse, resilient and connected ecosystems;  
and

... in places which are decarbonised and climate-resilient.

Future Wales' spatial strategy aims to support Welsh Government to address the Climate Emergency declared in 2019 through its policies and ambitions.

---

## Planning Policy Wales (PPW)

PPW explains that Placemaking is ‘a holistic approach to the planning and design of development and spaces, focused on positive outcomes. It draws upon an area’s potential to create high quality development and public spaces that promote people’s prosperity, health, happiness, and well being in the widest sense.

Placemaking considers the context, function and relationships between a development site and its wider surroundings. This will be true for major developments creating new places as well as small developments created within a wider place.

Placemaking should not add additional cost to a development, but will require smart, multi-dimensional and innovative thinking to implement and should be considered at the earliest possible stage. Placemaking adds social, economic, environmental and cultural value to development proposals resulting in benefits which go beyond a physical development boundary and embed wider resilience into planning decisions.

PPW sets out how to implement placemaking. The process starts with considering whether the development is in the right place and indicates that understanding how a place works is an important factor too.

the point in the trajectory when they are due to come forward for development’. This is in order to support the creation of sustainable communities and to remove barriers to meeting the supply of land for housing.

In addition to enhanced efforts to secure housing delivery, PPW11 introduces a greater focus on reducing energy demand and improving energy efficiency, recognising that:

‘The planning system should support new development that has very high energy performance, supports decarbonisation, tackles the causes of the climate emergency, and adapts to the current and future effects of climate change through the incorporation of effective mitigation and adaptation measures’

PPW states that development in the countryside should be located within and adjoining those settlements where it can best be accommodated in terms of infrastructure, access, habitat and landscape conservation. Infilling or minor extensions to existing settlements may be acceptable, in particular where they meet a local need for affordable housing.

---

## Planning Policy Wales (PPW)

In addition to enhanced efforts to secure housing delivery, PPW11 introduces a greater focus on reducing energy demand and improving energy efficiency, recognising that:

- ‘The planning system should support new development that has very high energy performance, supports decarbonisation, tackles the causes of the climate emergency, and adapts to the current and future effects of climate change through the incorporation of effective mitigation and adaptation measures’

Paragraph 5.8.2 outlines Welsh Government’s commitment to securing zero carbon buildings, as well as promoting low and zero carbon technologies to achieve this.

---

## Vale of Glamorgan Local Development Plan 2011-2026

At the strategic level, policy SP1, establishes a requirement to provide a range and choice of housing to meet the needs of all sectors of the community and development that favours a healthy living.

Policies SP3 and SP4 anticipate a need for 9,460 residential units over the Plan period, expected to provide 3,252 affordable residential units.

Policy SP10 emphasises the need to protect natural and built environmental assets and reinforces that sensitive design and choice of location of new development can have a positive effect on built and natural heritage.

In order to meet the housing land requirement of 9,460 new dwellings provision will be made for the development of up to 10,408 new dwellings during the plan period, to be met through a number of areas including small sites (9 units or less as this proposal is) for the construction of new dwellings includes 861 units on small sites.

Policy MG4 establishes that on sites of fewer than 10 dwellings the affordable housing requirement will be calculated and any whole units shall be provided on site, unless exceptional circumstances are demonstrated,

Policy MD1 sets out the framework for future development to take place on unallocated sites within VOG.

Policy MD2 sets out the key principles that developers should consider is respect to design, amenity and access which together contribute to attractive, safe and accessible environments.

Policy MD3 establishes that where there is an identified need for public open space, new residential development with a net gain of 5 or more dwellings will be required to provide outdoor public space.

In order to create sustainable places areas of open space will usually be required to be provided on-site as part of new development proposals. Where it is not practical or desirable to make provision on site, appropriate off-site provision or financial contributions for improvements to existing facilities will be required in lieu of on-site public open space.

With respect to other community infrastructure, whilst Policy MD4 seeks to ensure that all new developments in the Vale of Glamorgan are supported by appropriate services and facilities to meet their needs and the needs of the existing community, to create safe,

---

## LDP cont.

sustainable, liveable, healthy and mixed communities. This may be through improvements to existing facilities or the provision of new infrastructure. Notwithstanding this, we are aware that in September 2016, the Council's Cabinet agreed that schemes for 100% affordable housing of 25 or less residential units delivered by a partner Housing Association will be exempt from paying financial planning obligations (Minute C3271 refers).

Policy MD7 requires proposals to demonstrate they will not result in an unacceptable impact on people, residential amenity, property and/or the natural environment. It is important that any new development does not lead to unacceptable levels of pollution.

Policy MD9 requires new development proposals to conserve and where appropriate, enhance biodiversity.

Policy MD10 states that small scale affordable housing developments will be permitted outside settlement boundaries where they have a distinct physical or visual relationship with an existing settlement and where it is demonstrated that:

- 1. the proposal meets an identified local need which cannot be satisfied within identified settlement boundaries;

- 3. the proposed dwelling(s) will be constructed to of a scale size, tenure and design which is commensurate with the affordable housing need;
- 4. in cases where the dwelling is to be provided by either a private landlord or the intended occupier, secure mechanisms are in place to ensure the property shall remain affordable in perpetuity; and
- 5. the development has reasonable access to the availability and proximity of local community services and facilities.

As the site is located within the Ely Valley and Ridge Slopes Special Landscape Area (SLA) and a minerals safeguarding area (superficial sand and gravel deposits - category 2), policies MG17 and MG22 apply. MG17 is supportive of development that causes no unacceptable harm to the important landscape character of the area.

---

## Policy response

- The site sits outside settlement limits and being deemed to be in open countryside, is being brought forward under Policy MD10 which makes provision to allow affordable housing in areas outside of settlements identified in the LDP Settlement Hierarchy.
- Specifically, it advises that small scale affordable housing developments will be permitted outside settlement boundaries where they have a distinct physical or visual relationship with an existing settlement and where they satisfy a number of other specific requirements.
- The scheme is submitted with the support of Newydd Housing Association and has been developed in close liaison with the Council's Rural Housing Enabler officer.
- With regards to the requirement that the scheme has a distinct physical or visual relationship with an existing settlement, there are 26 existing residential dwellings in a ribbon manner along Drope Road, with properties largely facing the road. The proposed scheme would result in development in a similar ribbon form along Drope Road, continuing the existing pattern of development'. Whilst there is no clear 'village core', the proposed site is located broadly in the centre of the collection of rural dwellings that comprise the hamlet of Drope. This is in contrast to the pattern of development previously proposed which was for development in a cluster to the rear of existing properties on Drope Road.
- Aside from the matter of the relationship to the existing settlement, there is a need to consider the other criteria to Policy MD10 which require that the proposal meets an identified local need which cannot be satisfied within identified settlement boundaries and that the number of dwellings is in proportion to the size of the settlement and that the proposed dwelling(s) will be constructed to be of a scale, size, tenure and design which is commensurate with the affordable housing need;
- The Drope is not classified as a Minor Rural settlement that can accommodate growth. In terms of need, from our liaison with the Rural Housing Enabler, we are advised that there is an identified need within the Peterston Super Ely Ward.

---

## Policy response

As this scheme is put forward as a rural exceptions site, it is appreciated that the Council will need to satisfy itself that the need cannot be met on other more appropriate sites within the Ward, that would address the same need.

It is known from the original pre-application submission for this proposal that there have been pre-application submissions within the Peterston Super Ely Ward on sites which would be considered to wholly comply with the terms of Policy MD10, in that these sites were adjacent to a defined Minor Rural Settlement. Notwithstanding that, it is our understanding that none of those has resulted in a planning application and being nearly 2 years ago, suggest that the likelihood of them coming forward in place of this scheme is unlikely.

With Meadowlands Estate proposal, the Council has before it for its consideration a scheme that is well considered, delivers against national and local policy requirements in terms of placemaking, low carbon and sustainability requirements.

Turning specifically to housing need, liaison with the Rural Housing Enabler identifies the Peterston Super Ely ward-specific need of 62 as per the following table, plus a bungalow for the elderly.

1 Bed	29
2 Bed	19
3 Bed	9
4 Bed	5
5+ Bed	0
<b>Total</b>	<b>62</b>

The local lettings policy that governs the process and prioritises applicants with strong links to the community in which they wish to live. It is the intention of the policy to ensure new residents wish to remain in the area and show a commitment to the locality in which they will live.

Taking the example from those available on the Council's website of *Cwrt Canna, Llangan*, it demonstrates how the policy would work in practice. In that case, 6 priorities for lettings are presented, from candidates who have a local connection, have lived, worked or are retiring from 'tied accommodation' locally for a set and continuous period of time. Proof of local connection is required and size of property will be aligned with need.

---

## Policy response

Drawing on the locational context and in response to the Special Landscape Area MG17 policy consideration, the fact that this proposal is a continuation of the existing built form and is in the characteristic pattern of neighbouring development, it is considered to not have unacceptable impact on the features of the strategic designation.

With respect to minerals safeguarding, it is considered that the long term potential is not compromised.

Given the above and all that is contained herein, it is contended that this proposal shows clear alignment to material policy considerations, responds to place-making and other core guiding principles for the provision of affordable housing, has demonstrated that it can meet a proven need locally and is therefore a suitable rural exceptions housing proposal. Other technical assessment such as transport and ecological assessment demonstrate how the proposal is acceptable in the round and should therefore be viewed favourably. It is considered the planning balance is weighted in favour of granting planning permission accordingly.

